CLAIM AMENDMENTS

Claims 1-11 (canceled).

Claim 12 (withdrawn): A method for preventing current overloading and saturation of a switch power supply, comprising:

1) checking whether a primary current of an transformer, a current of an induction and a current of a power tube being excess an upper limit current; and

2) generating an adjusting signal so as to directly or indirectly adjust an error signal if the upper limit current is excess the upper limit, so that during subsequent adjustable periods, a duty cycle is reduced.

Claim 13 (withdrawn): A switch power supply utilizing the method as recited in claim 12, comprising a converter circuit, a feedback circuit, a control circuit and a supplemental circuit, wherein a protective circuit of said supplemental circuit comprises a serial of transformer primary or power tube current sample circuit, a serial of transformer primary or inductance or power tube upper limit current detecting circuit, and a regulating circuit adapted for directly and indirectly regulating an error signal according an outputted signal from said detecting circuit.

Claim 14 (withdrawn): A switch power supply IC utilizing the method as recited in claim 12, integrating a control circuit and a protective circuit, wherein said protective circuit comprises a serial of transformer primary or power tube current sample circuit, a serial of transformer primary or inductance or power tube upper limit current detecting circuit, and a regulating circuit adapted for directly and indirectly regulating an error signal according an outputted signal from said detecting circuit.

Claim 15 (withdrawn): The switch power supply IC, as recited in claim 14, wherein said control circuit further comprises a PWM circuit, an oscillator, and a drive circuit, said PWM circuit is adapted for outputting a pulse to said drive circuit which has two outputs, one of which is adapted for driving a base of a power triode and another of which is adapted for driving an emitter of said power triode.

Claim 16 (withdrawn): A digital processing high quality PFC, comprising a step for adjusting a PFC reference signal at predetermined ending point of a cycle, wherein

said cycle is integer multiple of a commercial power, and each of said ending point of said cycle is synchronized with an edge of the commercial power half cycle;

or said cycle is much larger than said half cycle of said commercial power; and

or said cycle is not synchronized with said edge of said commercial power half cycle nor much larger than said commercial power half cycle, wherein a single time adjusting capacity is small so as to satisfy IEC1000-3-2 and IEC1000-3-4 standard.

Claim 17 (withdrawn): A PFC device utilizing the method as recited in claim 16, further comprising a converter circuit, a reference circuit, a control circuit and a supplemental circuit, wherein said reference circuit comprises a series of voltage signal sample circuit of an output circuit, a voltage signal detection or module converter (A/D) circuit, a reference logic circuit and a reference output circuit, wherein said reference signal is send to said control circuit to generate a pulse.

Claim 18 (withdrawn): A PFC IC utilizing the method as recited in claim 16, further integrating a portion of a reference circuit, wherein said reference circuit comprises a series of voltage signal sample circuit of an output circuit, a voltage signal detection or module converter (A/D) circuit, a reference logic circuit and a reference output circuit, wherein said reference signal is send to said control circuit to generate a pulse.

Claim 19 (withdrawn): The PFC IC, as recited in claim 18, further comprising a control circuit of a pulse adjustable circuit comprising a ratio current circuit, a timing circuit, a pulse width adjustable logic circuit, a current amplifier and an oscillator wherein a PFC reference signal is applied as an output of said ratio current circuit, a pair of digital signal of said timing circuit are send to said pulse width adjustable logic circuit which in turn is adapted for outputting a pair of digital signal to said timing circuit, an output signal of the current amplifier is send to said timing circuit, said output signal from the oscillator is send to said pulse width adjustable logic circuit, finally said pulse width adjustable logic circuit will output a pulse signal.

Claim 20 (new): A green switch-mode power supply with standby function, comprising:

at least a standby switched-mode power supply, comprising at least a standby converter circuit, a standby feedback circuit, and a standby control circuit;

a main switched-mode power supply, for receiving a remote control signal, comprising at least a main converter circuit, a main feedback circuit, and a main control circuit, wherein said main feedback circuit comprises a main sampling circuit, a main error amplifier, a main isolation circuit, and a remote control circuit, wherein said main control circuit comprises at least a main impulse adjustable circuit, a main driven circuit and a main power supply prohibitive circuit; and

a supplemental circuit comprising at least an initiating circuit, a rectifying filter circuit, wherein DC terminal of said standby switched-mode power supply, said standby control circuit, DC input terminal of said main switched-mode power supply and said main control circuit are common grounded; and

a monolithic green switch power supply IC integrated with said standby control circuit, said main control circuit and said initiating circuit of said supplemental circuit, wherein said monolithic green switch power supply IC is activated by said initiating circuit and is power-supplied by said standby switched-mode power supply.

Claim 21 (new): The green switch-mode power supply, as recited in claim 20, wherein said remote control signal is sent to said main control circuit through said main feedback circuit, said main sampling circuit outputs a voltage signal to said main error amplifier through said main isolation circuit so as to output a main error signal, wherein when said remote control signal is an "off" signal, said power supply prohibitive circuit forces said main driven circuit to output a low electric level so as to switch off said main switched-mode power supply, and when said remote control signal is an "on" signal, said main impulse adjustable circuit generates a main impulse in responsive to said main error signal, such that said main driven circuit is normally operating to switch on said main switched-mode power supply.

Claim 22 (new): The green switch-mode power supply, as recited in claim 20, wherein said remote control signal is sent to said main control circuit in responsive to a

main error signal, wherein, in responsive to said main feedback circuit, when said remote control signal is an "off" signal, said remote control circuit forces said main error signal having a valve smaller than a predetermined threshold valve, when said remote control signal is an "on" signal, said remote control circuit is deactivated, such that said main sampling circuit outputs a voltage signal to said main error amplifier to generate an optically coupled current through said main isolation circuit so as to output a main error signal, wherein said main error signal is monitored by said main power supply prohibitive circuit and is arranged in such a manner that when said main error signal is smaller than said threshold valve, said remote control signal is assumed to be said "off" signal, such that said power supply prohibitive circuit forces said main driven circuit to output a low electric level so as to switch off said main switched-mode power supply, and when said main error signal is not smaller than said threshold valve, said remote control signal is assumed to be said "on" signal that said main impulse adjustable circuit generates a main impulse in responsive to said main error signal, such that said main driven circuit is normally operating to switch on said main switched-mode power supply.

Claim 23 (new): The green switch-mode power supply, as recited in claim 20, wherein said standby control circuit comprises at least a standby impulse circuit, and a standby driven circuit generating a standby impulse signal in responsive to a standby error signal, wherein said remote control signal is sent to said main power supply prohibitive circuit, wherein when said remote control signal is an "off" signal, said power supply prohibitive circuit forces said main driven circuit to output a low electric level so as to switch off said main switched-mode power supply, and when said remote control signal is an "on" signal, said main impulse adjustable circuit generates a main impulse in responsive to said main error signal, such that said main driven circuit is normally operating to switch on said main switched-mode power supply, wherein said supplemental circuit further comprises an offset circuit.

Claim 24 (new): The green switch-mode power supply, as recited in claim 20, wherein said standby control circuit comprises at least a standby impulse circuit, and a standby driven circuit generating a standby impulse signal in responsive to a standby error signal, wherein said remote control signal is sent to said main power supply prohibitive circuit in responsive to a main error signal, wherein said main error signal is monitored by said main power supply prohibitive circuit and is arranged in such a manner that when said main error signal is smaller than said threshold valve, said

remote control signal is assumed to be said "off" signal, such that said power supply prohibitive circuit forces said main driven circuit to output a low electric level so as to switch off said main switched-mode power supply, and when said main error signal is not smaller than said threshold valve, said remote control signal is assumed to be said "on" signal that said main impulse adjustable circuit generates a main impulse in responsive to said main error signal, such that said main driven circuit is normally operating to switch on said main switched-mode power supply, wherein said supplemental circuit further comprises an offset circuit.

Claim 25 (new): The green switch-mode power supply, as recited in claim 23, wherein said IC is further integrated with a PFC error amplifier and a PFC control circuit, wherein said PFC control circuit comprises at least a PFC impulse adjustable circuit and a PFC driven circuit.

Claim 26 (new): The green switch-mode power supply, as recited in claim 24, wherein said IC is further integrated with a PFC error amplifier and a PFC control circuit, wherein said PFC control circuit comprises at least a PFC impulse adjustable circuit and a PFC driven circuit.